UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/957,008	09/20/2001	Michael Ray Timperman	2001-0134.02	3800

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EXAMINER
PARK, JUNG H

ART UNIT	PAPER NUMBER
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	09/957,008	TIMPERMAN ET AL.
	Examiner	Art Unit	
	Jung Park	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07/18/2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15 and 19-30* is/are rejected.

7)☒ Claim(s) *16-18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Remark

1.   This communication is considered fully responsive to the Amendment filed 7/18/2006.

- The rejections of claims 16-18 have been withdrawn.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the
United States before the invention thereof by the applicant for patent, or on an international application
by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this
title before the invention thereof by the applicant for patent. ·

3.   Claims 1, 2, 5-7, 9, 10, 21-25, and 28-30 are rejected under 35 U.S.C 102(b) as being

anticipated by Hughes et al. (US 6,636,509, "Hughes").

Regarding claims 1, and 21, Hughes discloses the method of claim 1, and the

device of claim 21. Hughes discloses a method [and a device] of processing data

packets, comprising:

- receiving a plurality of the data packets (*IP input packets to parser 610 fig.6*) at a

selected node (*600 fig.1*);

.- extracting only pertinent information (*the parser extracts only "packet address" and

"TOS" fig.6; col.6, ln.60-63*) from the data packets, while ignoring nonpertinent

information from the data packets (*many fields in the packet fig.2 are ignored for this

processing*), the pertinent information being pertinent to the selected node; and

- generating a plurality of response data packets (*output packets of 630 fig.6*) based on

the pertinent information (*based on packet address and TOS only*), wherein the

extracting and generating steps are performed without use of a microprocessor (*a microprocessor is not used as shown in fig.6*).

Regarding claims 2 and 23, Hughes further teaches, "the extracting and generating steps are performed without use of a storage memory (*fig.6 where the extract step in parser and generating step in combiner are performed without use of a storage memory*)."

Regarding claims 5, 24 and 25, Hughes further teaches, "the step of transmitting the response data packets to a packetized data network (*a network connected to 160 fig.6 for sending out the modified IP packets*)."

Regarding claims 6, and 28, Hughes further teaches, "the receiving step includes receiving the data packets from a packetized data network (*parser 610 fig.6 receives IP packets from a packetized data network connected to 610 fig.6*)."

Regarding claim 7, Hughes further teaches, "the pertinent information includes a packet payload (*payload of a packet fig.2 included in the output of 630*)."

Regarding claim 9, Hughes further teaches, "the extracting step includes extracting header information (*packet address & TOS fig.6*)."

Regarding claim 10, Hughes further teaches, "the response data packets include

the header information (*packet output of 630 fig.6 includes the header information as*

shown in fig.2)."

Regarding claim 22, it is a claim corresponding to the generating step of claim 1

and are therefore rejected for the similar reasons set forth in the rejection of claim 1.

Regarding claim 29, Hughes is silent on the packet generator comprising an N to

M decoder. However, the decoder is a hardware device or software that converts coded

data back into its original form. Therefore, it is inherent that the combiner (630 fig.6) is a

hardware that converts N inputs to M output, or an N to N decoder.

Regarding claim 30, Hughes further teaches, "the pertinent information

comprises selected bytes within the data packets (TOS, SA, or DA bytes in the header

fig.2)."

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art
are such that the subject matter as a whole would have been obvious at the time the invention was made to
a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
negatived by the manner in which the invention was made.

5.   Claims 3, 8, and 11-15, 19-20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Hughes.

Regarding claims 3 and 8, Hughes is silent on "the selected node includes a peripheral device, the pertinent information being pertinent to the peripheral device."

However, at the time of the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to connect a peripheral device (such as a network adapter in a computer, a printer, etc) to the system of Hughes in order to utilize the classified IP packets.

Regarding claim 11, it is a claim corresponding to claims 1 and 3 and is therefore rejected for the similar reasons set forth in the rejection of claims 1 and 3.

Regarding claim 12, it is a claim corresponding to the generating step of claim 1 and is therefore rejected for the similar reasons set forth in the rejection of claim 1.

Regarding claim 13, it is a claim corresponding to claim 2 and is therefore rejected for the similar reasons set forth in the rejection of claim 2.

Regarding claim 14, it is a claim corresponding to claims 1 and 3 and is therefore rejected for the similar reasons set forth in the rejection of claims 1 and 3.

Regarding claims 15 and 19, they are claims corresponding to claims 5 and 6, respectively and are therefore rejected for the similar reasons set forth in the rejection of the claims.

Regarding claim 20, Hughes further teaches, "the system further comprising an interface interconnecting the peripheral device and the filter device (640 fig.6)."

6.   Claims 4, 26, and 27 are rejected under 35 U.S.C 103(a) as being unpatentable over Hughes in view of Ambe et al. (U.S. 6,876,653, "Ambe", cited in the first Office Action).

Regarding claims 4, 26, and 27, Hughes is silent on the state machine configured for receiving the signal from the filter device and issuing a request to the packet generator to transmit the response data packets (see state machine 22 in figure 1 of this application). However, Ambe teaches a filter comprising a state machine (*141 fig.14; col.21, ln.25-35 where ...actions taken by ...sending of the packet*) for the purpose described above.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include the state machine taught by Ambe into the system of Hughes since one would be motivated to utilize the computing device (state machine) designed with the operational states in order to provide faster performance at lower cost than a general purpose CPU.

Regarding claim 17, it is a claim corresponding to claim 5 and is therefore rejected for the similar reasons set forth in the rejection of claim 5.

Allowable Subject Matter

7.   Claims 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8.   Applicant's arguments, see pages 16-18, filed 07/18/2006, with respect to claim 16-18

have been fully considered and are persuasive. The rejections of claims 16-18 have

been withdrawn.

9.   Applicant's arguments with respect to claims 1-4, 8, 11, 15, 21, 22, 26, and 29 have

been fully considered but they are not persuasive.

Regarding claim 1

        At page 8, applicant argues that Hughes does not disclose, "extracting only

pertinent information from the data packets while ignoring non-pertinent information from

the data packets, the pertinent information being pertinent to the selected node".

        In reply, Hughes discloses that the parser extracts only "packet address" and

"TOS" fields as pertinent information from the incoming data packets as shown in fig.6

and many fields in the packet as shown in fig.2 are ignored during the extracting

processing. The pertinent information is pertinent to the selected node (600 fig.6).

        At pages 8-9, applicant argues that Hughes does not disclose, "generating a

plurality of response data packets based on the pertinent information, wherein the

extracting and generating steps are performed without use of a microprocessor".

        In reply, Hughes discloses that the combiner (630 fig.6) generates a plurality of

response data packets based on the pertinent information of incoming packets (col.5,

ln.65), that is, based on packet address and TOS. Also, the claim limitation of "extracting

and generating steps are performed without use of a microprocessor" reads on "the

remapper may be implemented in conventional hardware circuitry. (see fig.6; col.5,

ln.54-56). That is, the extracting and generating steps performed in parser and combiner

are implemented without a microprocessor.

Regarding claim 2

At page 10, applicant argues that Hughes discloses "the use of memory." In

reply, the extracting and generating steps itself implemented in parser and combiner do

not need a memory and a memory is used in output queues (160 fig.6).

Regarding claim 11

At page 10-11, applicant argues that Hughes does not discloses, "a peripheral

and a filter device connected to the peripheral device, the filter device being configured

to receive a plurality of data packets and identify only pertinent information in the data

packets while ignoring non-pertinent information from the data packets, the pertinent

information being pertinent to the peripheral device.

In reply, the Examiner rejected claim 11 using same rational as in the rejection of

claims 1 and 3. That is, Hughes discloses, "a parser as a filter device configured to

receive a plurality of data packets and identify only pertinent information in the data

packets while ignoring non-pertinent information from the data packets" as described in

the response to the argument of claim 1 above. The Examiner misplaced the claim 11

under USC § 102, but rejected the limitation of "a peripheral device connected to a filter

device and the pertinent information being pertinent to the peripheral device" under USC

§ 103 as rejected in claim 3 of the Office Action. The parser extracts only "packet

address" and "TOS" fields as pertinent information from the incoming data packets as

shown in fig.6 and many fields in the packet as shown in fig.2 are ignored during the

extracting processing. The pertinent information is pertinent to the selected node (600 fig.6). Therefore, at the time of the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to connect a peripheral device (such as a network adapter in a computer, a printer, etc) to the system of Hughes in order to utilize the classified IP packets at a device connected to the filter device.

Regarding claim 15

At page 12, applicant argues that Hughes does not disclose, "generate a plurality of response packets based on the pertinent information."

In reply, Hughes discloses that by using a plurality of incoming packets parsed by parser (col.5, ln.65-66), a combiner 630 generates a plurality of response packets based on the pertinent information (i.e., packet address and TOS) as described in the response of claim 1.

Regarding claim 21

At page 12, applicant argues that Hughes does not disclose, "a filter device configured to receive a plurality of data packets and identify on pertinent information in the data packet while ignoring non-pertinent information" In reply, Hughes discloses all the claim limitations as described in the response of claim 1.

At page 12, applicant argues that Hughes does not disclose, "generate a plurality of response packets based on the pertinent information" In reply, Hughes discloses the claim limitation as described in the response of claim 15.

Regarding claim 22

At page 13, applicant argues that Hughes does not disclose, "the filter device and the packet generator is microprocessorless". In reply, Hughes discloses the claim limitation as described in the response of claim 1.

Regarding claim 29

At page 13, applicant argues that Hughes does not disclose, "the packet generator comprising N to M decoder". In reply, the decoder is a hardware device or software that converts coded data back into its original form. Therefore, it is inherent that the combiner (630 fig.6) needs a hardware that converts N inputs to M output, or an N to N decoder.

Regarding claims 3 and 8

At page 14, applicant argues that Hughes does not disclose, "the subject matter of claim 1". In reply, the claims 3 and 8 are not allowable since as set forth above with respect to claim 1.

Regarding claims 4 and 26

At page 15, applicant argues that Hughes and Ambe do not discloses, "transmitting a signal indicating that the response data packets should be sent".

In reply, Ambe discloses that one of actions taken by the filter including state machine is sending of the packet to the CPU (see col.21, ln.25-35 as stated in the rejection of claim 4). That is, an action (i.e., a signal) is used to forward packets to a different device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the action taken by the filter taught by

Ambe with the remapper of Hughes since one would be motivated to use the computing device, (i.e., state machine), designed with the operational states (i.e., sending of response packets) in order to provide faster performance at lower cost than a general purpose CPU for the system without a microprocessor.

Conclusion

10.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung Park whose telephone number is 571-272-8565. The examiner can normally be reached on Mon-Fri during 6:15-3:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

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Jung Park
Patent Examiner